

Application No. 10/537391
Responsive to the office action dated July 9, 2009

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Amendments to the Claims:

This listing of claims will replace all prior versions and listings of claims in the application.

Listing of Claims:

1. (Currently Amended) A method of manufacturing an analytical tool, the method comprising a reagent member forming process for providing a base plate with a reagent member that includes a stack of at least two reagent layers separated by an intervening separation layer, each of the reagent layers containing a reagent that reacts with a specific component contained in sample liquid and is different from a reagent contained in other reagent layer,

wherein each of the reagent layers is formed by performing a plurality of steps of repeating a combined step of applying material liquid containing the reagent alternately with a plurality of steps of and then drying the applied material liquid, and

wherein the reagent layers separated by the intervening separation layer are aligned with each other in a direction perpendicular to the base plate.

2. (Currently Amended) The method of manufacturing an analytical tool according to claim 1, wherein the steps combined step of applying and drying the material liquid is are performed with use of material liquid containing a same reagent for as the reagent contained in each of the reagent layers.

3. (Currently Amended) The method of manufacturing an analytical tool according to claim 1, wherein the steps combined step of applying and drying the material liquid is are performed 2-200 times.

4. (Currently Amended) The method of manufacturing an analytical tool according to claim 1, wherein the material liquid applied to form each of the reagent layers contains 0.1-60 wt% of the reagent.

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5. (Currently Amended) The method of manufacturing an analytical tool according to claim 1,

wherein the base plate comprises a reagent holding portion formed as a recess including a bottom surface and a side surface, and

wherein the reagent member is formed in contact with the bottom surface.

6. (Currently Amended) The method of manufacturing an analytical tool according to claim 5, wherein the material liquid ~~for the reagent layer formed at a bottom of the reagent member is applied to an area of the bottom surface of the recess is spaced from the side surface thereof by a constant distance.~~

7. (Currently Amended I) The method of manufacturing an analytical tool according to claim 6, wherein the distance between the side surface of the recess and the area thereof to which the material liquid is applied with the material liquid is no smaller than 0.1μm.

8. (Original) The method of manufacturing an analytical tool according to claim 5, wherein the reagent holding portion has a depth of 50-200 μm.

9. (Original) The method of manufacturing an analytical tool according to claim 5, wherein the recess has a volume of 0.05-5 μL.

10. (Currently Amended) The method of manufacturing an analytical tool according to claim 1, wherein the material liquid is applied to form each of the reagent layers layer with use of an inkjet-type dispenser.

11. (Currently Amended) The method of manufacturing an analytical tool according to claim 10, wherein the dispenser is designed to dispense a droplet of 10-2000 pL,

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wherein the dispenser is used for applying the material liquid to form each of the reagent layers in a manner such that a plurality of droplets are attached to an application target portion.

12. (Currently Amended) The method of manufacturing an analytical tool according to claim 1, wherein an amount of the material liquid applied in each combined step of applying and drying the material liquid is 1-200 nL.

13. (Currently Amended) The method of manufacturing an analytical tool according to claim 1, wherein the material liquid applied to form each of the reagent layers is dried by supplying of heat energy.

14. (Previously Presented) The method of manufacturing an analytical tool according to claim 13, wherein the heat energy is supplied by utilizing radiant heat applied from above the applied material liquid.

15. (Original) The method of manufacturing an analytical tool according to claim 13, wherein the supply of heat energy is attained by holding a heat source in contact with a rear surface of the base plate.

16. (Currently Amended) The method of manufacturing an analytical tool according to claim 1, wherein a thin layer having a thickness of 0.1-5.0 μm is formed at by each combined step of performing one each of the applying step and the drying step of the material liquid,

wherein the reagent layer formed by the plurality of steps of applying and drying of the material liquid repeated combined step has a thickness of 1.0-50.0 μm , which is greater than the thickness of the reagent layer formed by one each of the applying and drying steps, upon completion of the reagent member forming process.

17-19. (Cancelled)

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20. (Currently Amended) A method of manufacturing an analytical tool, the method comprising a reagent member forming process for providing a base plate with a reagent member containing a reagent that reacts with a specific component contained in sample liquid,

wherein the reagent member forming process comprises performing a plurality of steps of repeating an applying and drying material liquid step, in each of the applying and drying material liquid step the material liquid containing the reagent is applied and then drying the applied material liquid is dried,

wherein the base plate comprises a reagent holding portion formed as a recess including a bottom surface and a side surface, and

wherein the reagent member comprises a group of individual separate reagent dots formed entirely within the recess and spaced from the side surface, the reagent dots in the group overlapping being held in contact with each other, the group of the reagent dots including a plurality of subgroups of reagent dots, each subgroup of reagent dots containing a different reagent, and the reagent dots in one subgroup overlapping the reagent dots in at least one of the other subgroups.

21. (Currently Amended) A method of manufacturing an analytical tool, the method comprising a reagent member forming process for providing a base plate with a plurality of reagent members, each reagent member containing a different reagent that reacts with a specific component contained in sample liquid and is different from the reagent in other reagent member,

wherein each of the reagent layers members is formed by performing a plurality of steps of repeating a combined step of applying and drying material liquid in which the material liquid containing the reagent alternately with a plurality of steps of drying the applied material liquid is applied and then is dried,

wherein the base plate comprises a flow path including a reagent holding portion formed as a recess and a constant width portion narrower than the reagent holding portion, the recess including a bottom surface and a side surface, and

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wherein at least one of the reagent members is formed in the recess, at least one of the other reagent members being formed within the constant width portion of the flow path at a portion other than the recess.

22. (New) An analytical tool comprising a base plate and a reagent member formed on the base plate, the reagent member including a stack of at least two reagent layers separated by an intervening separation layer, each of the reagent layers containing a reagent that reacts with a specific component contained in sample liquid, which is different from the reagent contained in other reagent layer,

wherein the reagent layer separated by the intervening separation layer are aligned with each other in a direction perpendicular to the base plate.

23. (New) An analytical tool comprising a base plate and a reagent member formed on the base plate, the reagent member containing a reagent that reacts with a specific component contained in sample liquid,

wherein the base plate comprises a reagent holding portion formed as a recess including a bottom surface and a side surface, and

wherein the reagent member comprises a group of separate reagent dots formed entirely within the recess and spaced from the side surface, the reagent dots in the group overlapping each other, the group of reagent dots including a plurality of subgroups of reagent dots, each subgroup of reagent dots containing a different reagent, and the reagent dots in one subgroup overlapping the reagent dots in at least one of the other subgroups.

24. (New) An analytical tool comprising a base plate and a reagent member formed on the base plate, the reagent member containing a reagent that reacts with a specific component contained in sample liquid,

wherein the base plate comprises a flow path including a reagent holding portion formed as a recess and a constant width portion narrower than the reagent holding portion, the recess including a bottom surface and a side surface, and

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wherein at least one of the reagent members is formed in the recess, at least one of the other reagent members being formed within the constant width portion of the flow path.